## **ABSTRACT**

A method for manufacturing inexpensive and high-quality engine fuel, from a starting material comprising waste vegetable oils which have been conventionally wasted, is provided.

5

10

15

There are provided; a starting-material tank 1 for storing oil/fat therein; a filtering device for filtering out solid components of the oil/fat in the starting-material tank; a first reaction vessel 5 for conducting first cracking by reacting ozone with the oil/fat; an oil/water separation device 4 for separating that water content involved in the cracking reaction, from the oil/fat; a first filtering device 8 for conducting first filtering of the oil/fat; a second reaction vessel 9 for conducting second cracking; a second filtering device 10; an adding device for adding an additive; an impurity adsorbing vessel 12 and a filtering vessel 13 for cooperatively purifying the water phase component from which the oil/fat phase has been excluded by the oil/water separation device; wherein in each of the first reaction and second reaction, there are delivered a reducing agent and polymerization inhibitor into the oil/fat.